

Zero-Insertion-Force Hinged Clam-Shell Socket for Testing Memory Modules

Abstract

A test socket for testing memory modules requires little or no insertion force. A base holds a funnel-shaped guide that guides the edge of the memory module into a desired position. Two housing halves are connected to the base by one or more hinges. The housing halves pivot around the hinges to open and close the test socket. Linkages, springs, or solenoids move the housing halves. Metal contact pads on flexible membranes are attached to each housing half and clamp onto contact pads on an inserted memory module when the housing halves are closed. Scooped vise clamps can be used to pinch together the ends of the housing halves to close the test socket. More test sockets can be fitted into a smaller pitch using the scooped vise clamps since the solenoids are along the longer axis of the test socket.